SEPT, 1989 BE-5B

DISOSS BE-5B SERVICE NOTES

First Edition

BASS MULTIPLE EFFECTS

5 SPECIAL SELECTED EFFECTS FOR BASSISTS

5. Delay/Chorus/Flanger

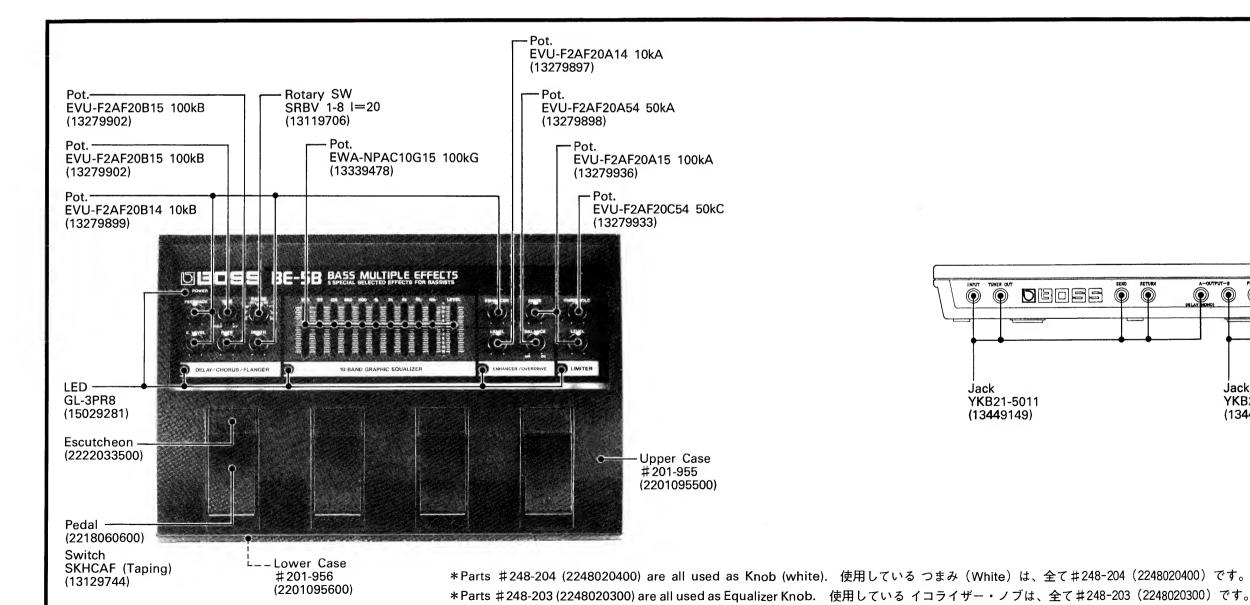
SPECIFICATIONS

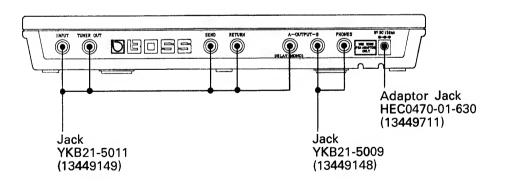
ERRATA & SUPPLEMENT is attached at the end of the page.

ut Level/Impedance		:20dBm/1MΩ
ner Out	Output Level	:-20dBm
	Output Impedance	:2kΩ
	Output Load Impedance	:Over 20kΩ
ect Send ·······	Output Level	:20dBm
	Output Impedance	:1kΩ
	Output Load Impedance	:Over 10kΩ
ect Return ·····	Input Level	:-20dBm
	Input Impedance	:47kΩ
tput A/B ·····	Output Level	:-20dBm
	Output Impedance	:1kΩ
	Output Load Impedance	:Over 10kΩ
ones	Output Impedance	:47 Ω
	Optimum Headphone Impdance	:8 to 100Ω *0dBm=0.
It-in Effects		: 1. Limiter
		2. Overdrive
		3. Enhancer

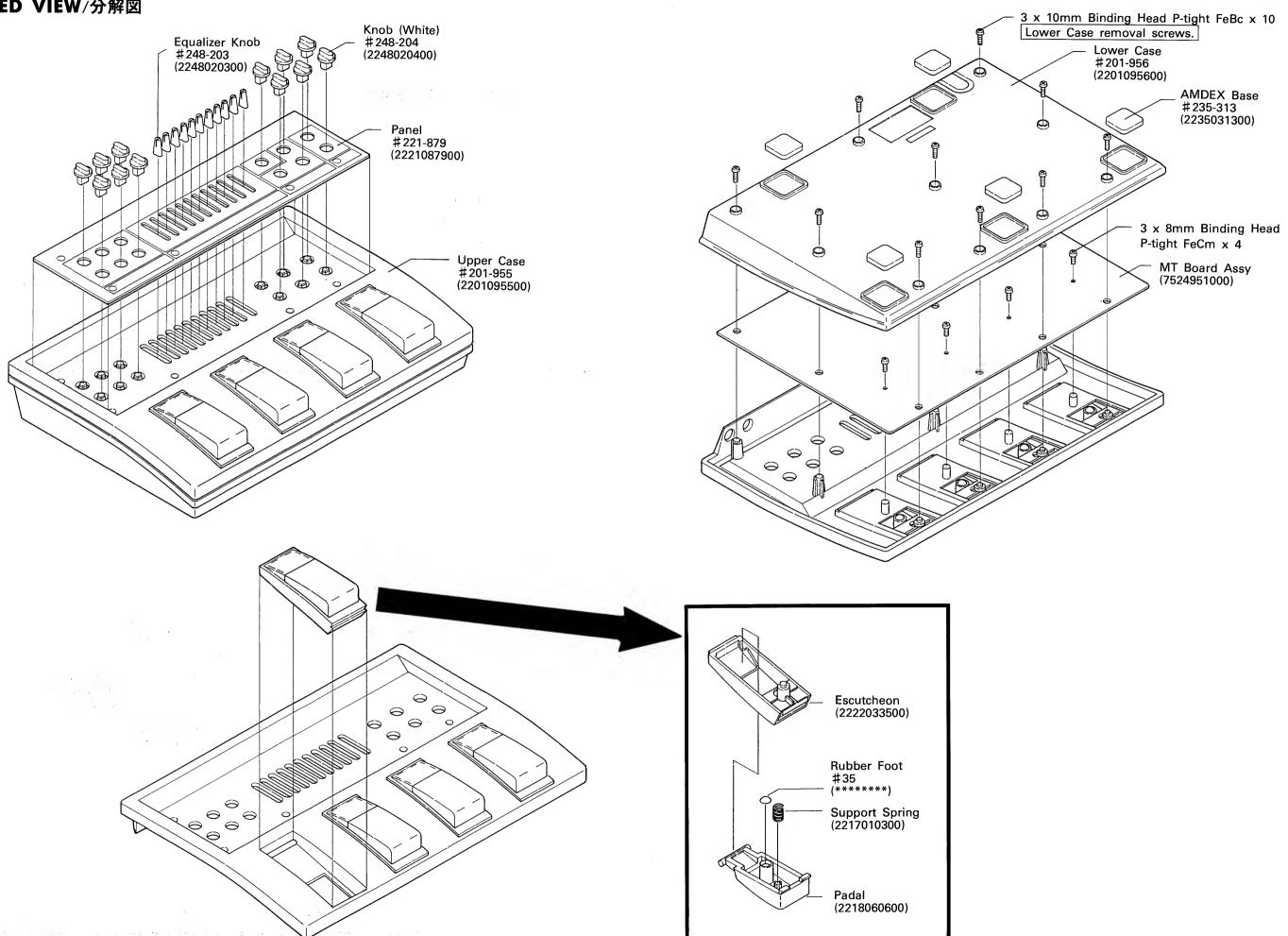
Digital Delay Delay Time from 2 to 500ms Frequency Response 20Hz to 15kHz (+1, -3dB) Residual Noise Less than -90dBm (IHF-A) with Fine x 0.5 Power ······Current Draw AC Adaptor (PSA Series 150mA :300(W) × 40(H) × 200(D)mm 11-13/16(W) x 1-9/16(H) x 7-7/8(D) inch :950g/ 21b 2oz (not including AC Adaptor) :Owner's Manual (7524922900), 取扱説明書 (7524922100) AC Adaptor - PSA-100 (12449509), PSA-120 (12449510) 0.775V PSA-220 (12449511), PSA-240 (12449512) :Chromatic Tuner (TU-12, TU-12S), Volume Pedal (FV-50L) 4. Graphic Equalizer

TABLE OF CONTENTS	目次	Page
SPECIFICATIONS	仕様	1
EXPLODED VIEW	分解図	2
PARTS LIST	パーツリスト	3
MT BOARD	基板図	4
BLOCK DIAGRAM	ブロック図	4
CIRCUIT DIAGRAM	回路図	5
ADJUSTMENT	調整仕様	6
CHANGE INFORMATION	変更案内	6
APPENDIX (ENHANCER/OVERDRIVE CHECK PROCEDURE)	付録 (ENHANCER/OVERDRIVE 検査仕様)	6





EXPLODED VIEW/分解図



PARTS LIST

SAFETY PRECAUTIONS: CONSIDERATIONS ON PARTS ORDERING When ordering any parts listed in the parts list, please specify the following items in the order sheet.

OTY PART NUMBER DESCRIPTION MODEL NUMBER The parts marked 🛆 have DESCRIPTION safety-related characteristics. MODEL NUMBER 10 22575241 Sharp Key Use only listed parts for 15 2247017300 Knob (orange) DAC-15D replacement. Failure to completely fill the above items with correct number and description will result in delayed or 安全上の注意: even undelivered replacement. △が付いている部品は,安全上 パーツ発注に関するお願い 特別な規格でつくられたもので オーダーシートには、必ず下記の4項目は正確に記入して下さい。(例外は除く)

<u>必要数</u> パーツナンバー <u>品 名</u>
例) 10 22575241 Sharp Key
15 2247017300 Knob (orange) 使用機種 C-20/50 す。 交換の際は、指定された部品番 DAC-15D 号以外の部品は使わないように もし記入漏れ、誤記等が有る場合、必要部品が発送出来なかったり、大幅な遅れの原因になります。 して下さい。 御協力をお願いします。

PANEL, CASING				
2201095500 2201095600 2221087900 2218060600 2222033500	BE-5B Upper Case #201-955 BE-5B Lower Case #201-956 BE-5B Panel #221-879 BE-5 Pedal BE-5 Escutcheon			
PCB ASSY				
7524951000	MT Boar	d (pcb 2292079301)		
KNOB, BUTTON				
2248020400 2248020300	BE-5B Knob #248-204 White BE-5B Equalizer Knob #248-203		White	
SWITCH				
13129744	Tact SW	SKHCAF (Taping)		
JACK, SOCKET				
13449148 13449149 13449711 INDUCTOR	YKB21-5 YKB21-5 HEC0470	011	OUTPUT B/PHONES INPUT/TUNER OUT/SEND/RETURN/OUTPUT A Adaptor Jack	
13529145	DSS306-	55FZ103N	EMI Filter	
POTENTIOMETER				
13279897 13279899 13279898	10kA 10kB 50kA	EVU-F2AF20A14 EVU-F2AF20B14 EVU-F2AF20A54	OD/ENHANCER: LEVEL OD/ENHANCER: ENHANCER DELAY/CHORUS/FLANGER: DEPTH, F.BACK, E.LEVEL OD/ENHANCER: BALANCE	
13279933 13279936 13279902 13279935 13339478 13119706 13299197 13299231	50kC 100kA 100kB 100kC 100kG SRBV1-8 100kB 500B	EVU-F2AF20C54 EVU-F2AF20A15 EVU-F2AF20B15 EVU-F2AF20C15 EWA-NPAC10G15 I = 20 (Rotary SW) EVND4AA00B15 EVND4AA00B52	LIMITER: THRESHOLD LIMITER: LEVEL, OD/ENHANCER: DRIVE DELAY/CHORUS/FLANGER: FINE DELAY/CHORUS/FLANGER: RATE GRAPHIC EQUALIZER: LEVEL, BAND DELAY/CHORUS/FLANGER: RANGE RT1 RT2	

TRANSISTOR				
15119149		2SA1048GR		
15119150		2SA1335GR		
	O	r 15119111 2SA970GR		
15129186	-	2SC3378GR		
	O	r 15129120 2SC2240GR		
15129185	•	2SC2458GR		
15129203		RN1211	Digital TR	
15199109J0		NJM78L05	Voltage Regulater	
15119423		2SA965Y	v evange vvegamener	
15129426		2SC2235Y		
15139131		2SK184GR	FET	
	O	r 15139106 2SK117GR		
IC				
		MEDIOL	OD America	IC1 2 4 F 0 0 14 14 00
15189136		M5218L	OP Amp	IC1, 2, 4, 5, 8, 9, 11, 14, 22
15189185		M5223L	OP Amp	IC19
15189203		MPC4072HA	OP Amp	IC3, 17
15189111J1		NJM311D	Comparator	IC18
15189190		M5216	OP Amp	IC6
15229875		MN51010 RBA BOS-008	Gate Array	IC20
15159115T1		TC4066BP	Quad Bilateral Switch1	IC16
15209114		TC9130P	V04	IC13
15219124		uPC1252H2	VCA	IC7
15219163		NE572	Noise Reduction	IC15
15179359		M5M4464P-12	D-RAM	IC21
15219219		LA3607		IC12
DIODE, LED			0	
15019125		1SS133		
15019508		RD2.0EB1	Zener	
15019209T0		S5500G		
15029281		LED GL-3PR8	RED	
RESISTOR				
13919175		RKM14L472-942F	R-2R Ladder	
MISCELLANEO	US	•		
2235031300		AMDEK Base #235-313		
2217010300		Support Spring		
*****		Rubber Foot #35		
ACCESORIES				
7524922900		Owner's Manual		
7524922100		取扱説明書		
12449509		PSA-100	100V	AC Adaptor
\triangle	or	12449597RT PSA-100T		
<u></u> 12449510		PSA-120	117V	
\triangle	or	12449598RT PSA-120T		
 12449511		PSA-220	220V	
12449512		PSA-240	240V	- 1 × - 1 × - 2

Q

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

MT BOARD

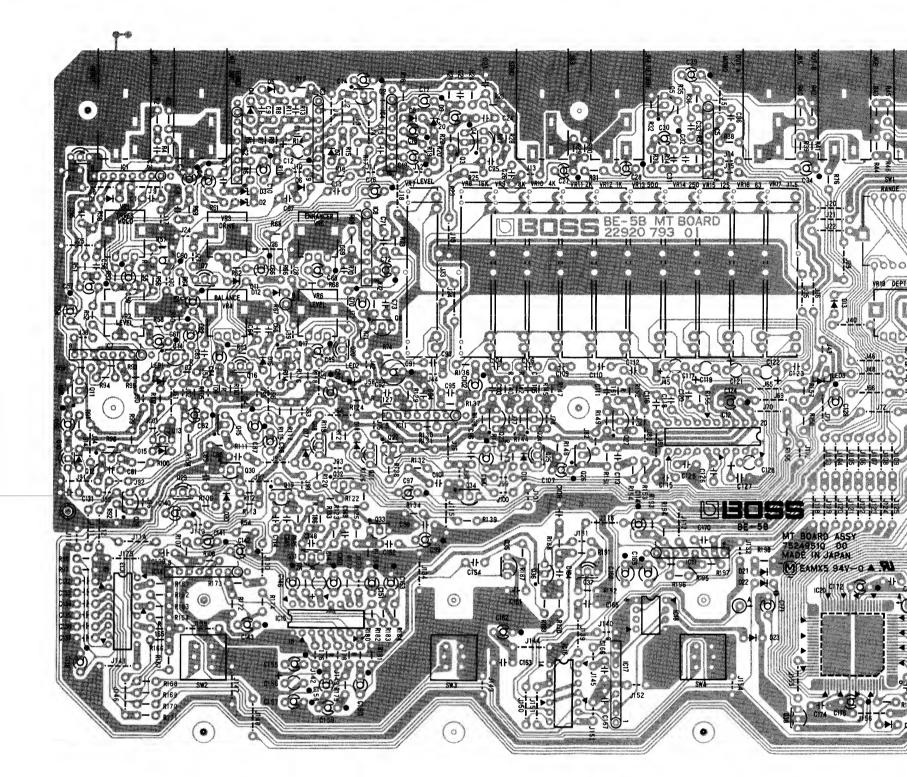
ASSY 7524951000 (pcb 2292079301)

C

100000 1000000

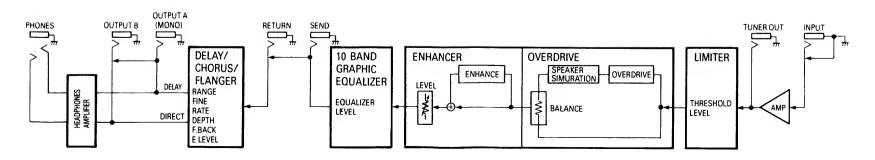
K

N

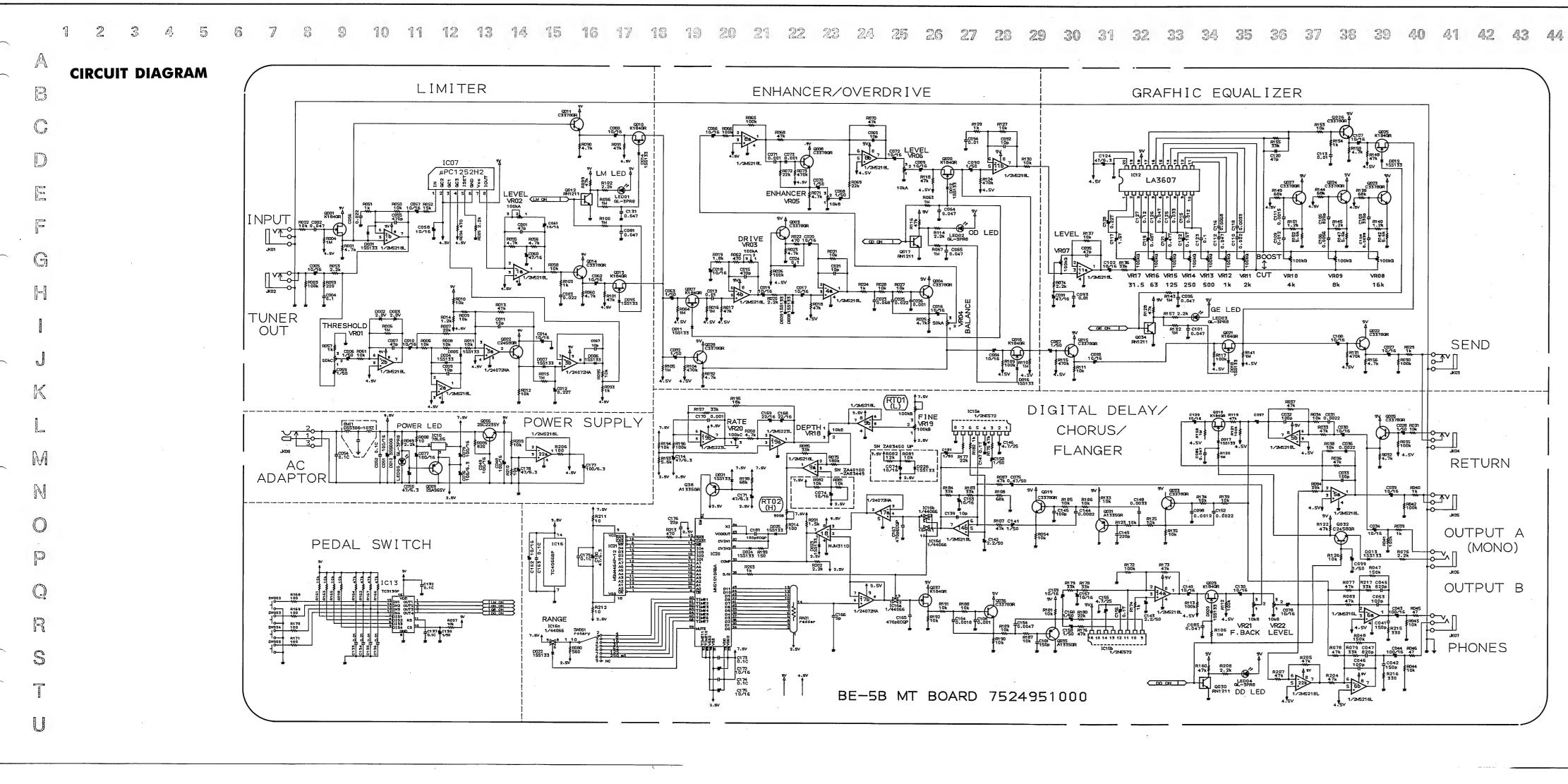


View from foil side.

BLOCK DIAGRAM



SEPT, 1989



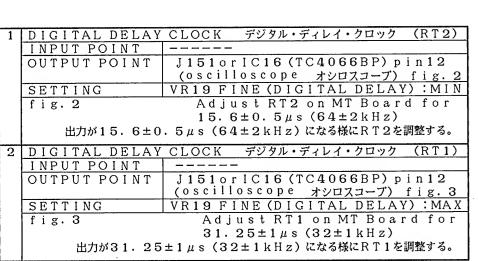
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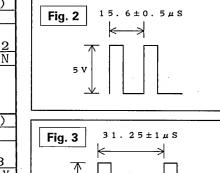
ADJUSTMENT

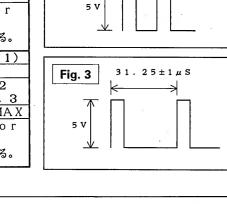
調整仕様

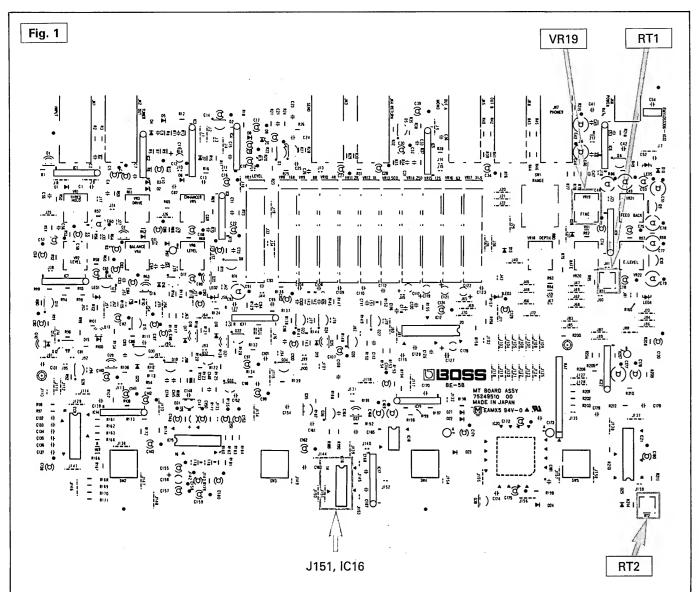
Refer to the Fig.1 about location of adjusting point, checking point.

調整箇所、検査箇所の位置については、Fig.1を参照してく ださい。









View from foil side.

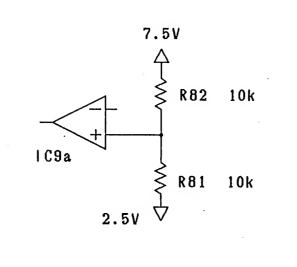
CHANGE INFORMATION

O Change the circuit

Added - D26 : 1SS133(15019125) Change - R82 : $10k\Omega$ to $12k\Omega$

EFF.SNo. ZA83450 -up Reason :Compensate for temperature rises in the internal clock generation circuit of the gate array (IC20) to minimize frequency drifts. (Refer to the figure below for detail.)

SNo. ZA40100-ZA83499



変更案内

◎ 回路変更

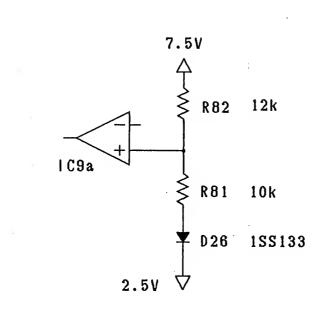
変更内容 部品追加: D26 1SS133(15019125)

(詳細は,下図参照)

実施製番 ZA83450 以降 理由 :ゲートアレイ (IC20) 内部のクロック発生回 路での温度上昇を補正し、周波数変化を最小 に押さえるため。

抵抗値変更: R82 10kΩ → 12kΩ

SNo. ZA83450-up



BE-5B

付録

APPENDIX

ENHANCER/OVERDRIVE CHECKING

as shown below.

1. Feed the test signal to INPUT of the BE-5B.

2. Connect the scope to OUTPUT of the BE-5B.

4. Set the controls and make sure of the waveforms

3. Push OVERDRIVE/ENHANCER pedal for EFFECT

1. INPUT にオーディオ発振器を接続する。

ENHANCER/OVERDRIVE 検査仕様

2. OUTPUT にオシロスコープを接続する。

3. ペダルスィッチを押してエフェクト オンにする。

4. 下記のようにセッティングして検査する。

INPUT	SET CONTROLS	OUTPUT
200Hz 20mVp-p	ENHANCER DRIVE LEVEL BALANCE	1ms/DIV .5V/DIV
	ENHANCER DRIVE LEVEL BALANCE	1ms/DIV .5V/DIV

